

**In the Specification:**

Replace the original Abstract filed on November 23, 2003 with the replacement Abstract previously filed on March 2, 2004 as follows:

A carburetor dual fuel feed system has a primary passage for flowing fuel into a venturi of a fuel-and-air mixing passage, and a supplemental channel flowing fuel into a mixing passage upstream region. Sizing of the primary passage and channel with respect to pressure dynamics of each region disassociates low from high power engine fuel calibration. This disassociation ultimately achieves a leaner fuel-and-air mixture flow during low power conditions which reduces carbon monoxide emissions, and achieves a richer mixture flow during high engine power conditions which reduces NOx emissions. During low engine power conditions, substantially all of the fuel which mixes with clean air flowing through the venturi of the mixing passage flows from the primary passage. During high engine power conditions, supplemental fuel flow into the mixing passage is induced by a vacuum created about a nozzle of the channel.

Please amend paragraph [0002] beginning on page 1 as follows:

[0002] Small internal combustion engines, utilize carburetors to deliver a mixture of fuel-and-air to an intake manifold of the engine. The carburetor body typically carries a fuel-and-air mixing passage which is restricted by a venturi between an inlet or upstream region and a downstream region of the passage. Clean air at substantially atmospheric pressure typically flows from an air filter and through the upstream region where the air flow rate is controlled by a choke valve disposed pivotally in the upstream region. Clean air flowing past the choke valve increases in velocity as it enters the ~~venture~~ venturi region thus creating a vacuum or sub-atmospheric condition at the ~~venture~~ venturi region which causes liquid fuel to flow from a fuel chamber at atmospheric pressure, through a primary fuel feed passage and into the venturi region from a fuel orifice or nozzle disposed at the radially inner most location of the venturi. The entering fuel mixes with the incoming clean air and flows as a mixture through the downstream region of the fuel-and-air mixing passage. The volumetric flow rate of the fuel-and-air mixture entering the engine intake manifold is controlled generally by a throttle valve disposed pivotally in the downstream region of

passage. When the engine is idling or at low power conditions, the throttle valve is substantially closed thus limiting the rate of air flowing through the mixing passage which reduces the vacuum at the venturi region and in-turn reduces the rate of fuel flowing through the primary fuel feed passage.

Please amend paragraph [0020] beginning on page 8 as follows:

[0020] The timing or sequencing of when the check valve 57 opens along an operating power curve of the engine preferably is fine-tuned by the sizing of an air bleed aperture 68 disposed between the nozzle 40 and check valve 57 of the supplemental fuel channel 38. As illustrated in FIG. 1, the air bleed aperture 68 extends through the lid 52 and thus communicates between the exterior environment at atmospheric pressure and the compartment portion 48 of the supplemental fuel channel 38 defined between the outer surface 50 of the body 14 and the lid 52. The larger the aperture 68, the greater the vacuum bleed, thus increasing the delay time before the check valve 57 opens to allow supplemental fuel to produce ~~and~~ an emulsion to flow. The aperture 68 also serves to add air to the incoming liquid fuel to produce an emulsion ~~which~~ that improves mixing of fuel and clean air within the mixing passage 16 thus promoting more efficient combustion within the engine.